DOCUMENT RESUME

ED 185 764 EC 123 919

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TITLE Nondiscriminatory Assessment and Decision Making: Embedding Assessment in the Intervention Process.
INSTITUTION Minnesota Univ., Minneapolis. Inst. for Research on Learning Disabilities.
SPONS AGENCY Bureau of Education for the Handicapped (DHEW/OE), Washington, D.C.
REPORT NO IRLD-Mono-7
PUB DATE Feb 79
CONTRACT 300-77-0491
NOTE 37p.; See also EC 123 901-925.

EDRS PRICE MF01/PC02 Plus Postage.
DESCRIPTORS Compliance (Legal): Decision Making; *Disabilities; Elementary Secondary Education; Evaluation Methods; Intervention; *Minority Groups; *Models; *Student Evaluation; *Test Bias; Testing Problems
IDENTIFIERS Education for All Handicapped Children Act

ABSTRACT

The authors suggest that efforts to comply with the protection in evaluation procedures provisions of P.L. 94-142 (the Education for All Handicapped Children Act) have been characterized by attempts to identify a single fair test for use with specific groups of minority children, and that such efforts will not result in improved efforts to eliminate bias in assessment. Defining assessment as the process of collecting data to make decisions about pupils, the authors conceptualize a model in which instructional decisions are made using data on the history of intervention effectiveness with individual students. Operationalization of an instructional cascade and systematic documentation of pupil progress throughout levels of the cascade are proposed as alternatives to current norm referenced decision making practices. (Author)

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I. Adequacy of Norm-Referenced Data for Prediction of Success

II. Computer Simulation Research on the Assessment/Decision-making/Intervention Process

III. Comparative Research on Children Labeled LD and Children Failing Academically but not Labeled LD

IV. Surveys on In-the-Field Assessment, Decision Making, and Intervention

V. Ethological Research on Placement Team Decision Making

VI. Bias Following Assessment

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Monograph No. 7

NONDISCRIMINATORY ASSESSMENT AND DECISION MAKING: EMBEDDING ASSESSMENT IN THE INTERVENTION PROCESS

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February, 1979

Abstract

To date, efforts to comply with the Protection in Evaluation Procedures Provisions of Public Law 94-142 have been characterized by attempts to identify the fair test for use with specific groups of minority children. Based on a review of similar efforts in the history of psychology, the authors conclude that such activities will not result in improved efforts to eliminate bias in assessment. Instead, they emphasize the fact that bias can and does occur throughout the process of making decisions for and about handicapped students.

Defining assessment as the process of collecting data for the purpose of making decisions about pupils, the authors conceptualize a model in which instructional decisions are made using data on the history of intervention effectiveness with individual students. Operationalization of an instructional cascade, and systematic documentation of pupil progress throughout levels of the cascade are proposed as alternatives to current norm-referenced decision-making practices.

The recent and significant changes in public policy on the education of handicapped children are reflected in the provisions of Public Law 94-142, the Education for All Handicapped Children Act. The law is designed to meet four major purposes, described by Ballard and Zettel (1977) as follows:

1. to guarantee that special educational services are available to children who need them,
2. to assure that decision-making regarding provision of services to handicapped students is both fair and appropriate,
3. To establish clear management and auditing requirements and procedures for special education at all levels of government, and
4. To provide federal funds to assist states in educating handicapped children and youth.

This paper focuses on the second purpose described above, and specifically on those provisions of the law typically referred to as the "Protection in Evaluation Procedures" provisions. The law specifies (Section 615-5c) that states and their localities will develop:

> Procedures to assure that testing and evaluation materials and procedures utilized for the purposes of evaluation and placement of handicapped children will be selected and administered so as not to be racially or culturally discriminatory. Such materials or procedures shall be provided and administered in the child's native language or mode of communication, unless it clearly not feasible to do so, and no single procedure shall be the sole criterion for determining an educational program for a child.

Specific rules and regulations for implementation of the "Protection in Evaluation Procedures" (PEP) provisions were published in The Federal Register, August 23, 1977 (pp. 42474-42518). These rules

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and regulations specify that:

1. Before any action is taken with respect to the initial placement of a handicapped child in a special education program, a full and individual evaluation of the child's educational needs must be conducted in accordance with the requirements of rule 121a.532 (Rule 121a.531).
2. State and local education agencies shall insure, at a minimum that:
   (a) Tests and other evaluation materials:
      (1) Are provided and administered in the child's native language or other mode of communication, unless it is clearly not feasible to do so;
      (2) Have been validated for the specific purpose for which they are used; and
      (3) Are administered by trained personnel in conformance with the instructions provided by their producer;
   (b) Tests and other evaluation materials include those intended to assess specific areas of educational need and not merely those which are designed to provide a single general intelligence quotient;
   (c) Tests are selected and administered so as best to insure that when a test is administered to a child with impaired sensory, manual, or speaking skills, the test results accurately reflect the child's aptitude or achievement level or whatever other factors the test purports to

measure, rather than reflecting the child's impaired sensory, manual, or speaking skills (except where those skills are the factors which the test purports to measure);

(d) No single procedure is used as the sole criterion for determining an appropriate educational program for a child; and

(e) The evaluation is made by a multi-disciplinary team or other specialist with knowledge in the area of suspected disability.

(f) The child is assessed in all areas related to the suspected disability, including where appropriate, health, vision, hearing, social and emotional status, general intelligence, academic performance, communicative status, and motor abilities (20 U.S.C. 1415 (b) (2) (B) (121a.532 a-f).

Ysseldyke (1978a) called attention to the fact that review of Congressional testimony relevant to the "Protection in Evaluation Procedures" indicates an obviously much broader concern than simply with the fairness of tests and test items as used with members of minority groups. This broader concern is with abuse in the entire process of using assessment data to make decisions about pupils. Abuse is evident in many arenas relevant to assessment of children and includes: 1) inappropriate and indiscriminate use of tests, 2) bias in the assessment of handicapped children, and identifying as handicapped those who are not, 3) bias throughout the decision making process, and 4) bias following assessment.

This nation, its researchers, and educators, have exhibited considerable effort in attempts to identify the fair test for use with students from specific racial or cultural groups. For decades, psychologists have struggled with the concept of nondiscriminatory assessment. Initially, when differences were observed in the test performance of children representative of minority and majority racial, cultural or ethnic groups, extensive efforts followed to identify "causes" for the observed differences. These efforts were followed by extensive attempts to ascertain the extent to which specific tests or test items were fair for specific racial or cultural groups. Efforts to define and demonstrate fairness culminated in the development of numerous "models" of test fairness, or conversely of test bias (Guion, 1966; Cleary, 1968; Darlington, 1971; Einhonn & Bass, 1971; Thorndike, 1971; Linn, 1972; Cole, 1973). One factor became overwhelmingly clear: there was little agreement among model developers; indeed, there was little or no agreement regarding the concept of "nondiscriminatory assessment."

Within the past few years, as SEAs and LEAs have endeavored to implement the PEP provisions of PL 94-142, we see history being repeated. State Education Agencies develop lists of tests that can be used with children from specific racial or cultural groups. LEAs engage in a diverse set of behaviors designed to produce "nondiscriminatory assessments". Mercer (1977) characterized at least eight kinds of efforts to achieve nondiscriminatory assessment, and described some of their shortcomings. These can be summarized as follows:

1. Development of Culture Free tests. Many have proposed

we engage in extensive efforts to develop Culture Free tests. Such efforts, historically, have been impossible because there is no culture free learning. Learning occurs in environmental contexts and, in fact, consists primarily of the inculcation of the culture.

2. Development of Culture Fair Tests. Efforts have been made to construct tests in which items are "balanced" so they represent multiple languages and cultures. Such efforts have been unsuccessful. "Culture fair" tests have not demonstrated good predictive validity; they are poor predictors of success in a mono-cultural school system, and have been for the most part rejected by the dominant cultural group.

3. Development of Culture-Specific Tests. Efforts have been made, as noted earlier, to develop culture-specific tests (specific to the Black culture, Hispanic culture, etc.). These tests, like culture fair tests, have demonstrated low predictive validity, and have been rejected by the dominant cultural group. Production of such devices has been difficult, because no one test will satisfactorily assess the heterogeneous group of children in any one cultural or ethnic group.

4. Use of Piagetian Tests. On many occasions those who seek fair assessment of children have proposed the use of Piagetian developmental scales. Such efforts have not resulted in fair assessment; specific items are as culturally depen-

dent as are items on more traditional scales, and predictive validity is low.

5. Linguistic Translation of Existing Tests. Efforts to administer tests in children's native language have often consisted of translating existing tests into other languages. Translation changes item difficulty and destroys the applicability of existing norms (which unfortunately are too often used despite item translation). Once again, predictive validity for success in a monocultural school system has been low.

6. Alteration of Administration Procedures. When handicapped youngsters are assessed, assessors often try to achieve fairness by changing administration procedures. We witness, for example, the administration of verbal tests in sign language to deaf and hearing-impaired children. Nonstandardized administration procedures disallow the use of existing norms, and unless special population norms are constructed, norm-referenced interpretations is impossible.

7. Training Children to Take Tests. Some researchers and practitioners have advocated that children be trained to take tests prior to being assessed. Specific procedures have ranged from training in test-wiseness to task familiarization training. This is a viable way to eliminate or reduce observed score variance due to lack of familiarity with what is being required. The procedure is a time-consuming, but worthwhile alternative to traditional assessment procedures. It will not, however, reduce many aspects of bias in decision-making.

Mercer and Lewis (1978) developed a System of Multicultural Pluralistic Assessment (SOMPA). For the most part, the system uses existing tests, but pluralistic norms. Different regression equations are used to compute the "estimated learning potential" of children from Black, Anglo, and Chicano groups. The system adjusts upward the test scores earned by minority group children, and in our opinion fails to account adequately for the extremely heterogeneous acculturation of any one racial or ethnic group.

Throughout the numberous efforts of education agencies to cope with traditional assessment practices and to develop means of engaging in nondiscriminatory assessment, it is our belief that we have "forgotten" some very important facts. Efforts to develop nondiscriminatory assessment procedures have focused on tests and attempts to "clean them up." Yet, as has been noted elsewhere (Salvia & Ysseldyke, 1978; Ysseldyke, 1978a, b), nondiscriminatory assessment will not be achieved by developing "fair tests." Even if we had the fair test, we would still have considerable bias in the decision-making process. We believe that to meet both the letter and spirit of the law, educators must begin viewing assessment within the context of instructional intervention.

Assessment is clearly and simply the process of collecting data for the purpose of making decisions about pupils (Salvia & Ysseldyke, 1978). Typically, assessment and intervention have been viewed as separate and distinct entities. Yet, assessment data are used appropriately to make a variety of decisions that are, in fact, interventions. Assessment data are used to make: (1) referral decisions; (2) screening decisions; (3) classification, identification, eligibility or placement

decisions; (4) instructional planning decisions; (5) pupil evaluation decisions; and (6) program evaluation decisions (Salvia & Ysseldyke, 1978; Ysseldyke & Thurlow, 1978).

Realistic evaluation of the assessment and intervention paradigms reveals structures and characteristics common to both; the two are parts of one process. Further analysis of the interactive functioning of the assessment/intervention process reveals that assessment cannot be viewed as a static process, "but a process that directly and significantly impacts intervention" (Ysseldyke, 1978b, p. 6). Assessment and intervention are integral parts of a dynamic process - a process whose effectiveness is a function of at least five basic factors in complex interaction, as well as the kinds of data collected and the types of decisions to be made. Figure 1 illustrates the five factors that interact to affect intervention effectiveness. That effectiveness is a function of (1) the characteristics of the child, (2) the characteristics of the teacher, (3) the nature of the treatment or intervention employed, (4) the setting in which intervention is instituted, and (5) the kind of behavior change (learning) one is attempting to bring about. The five factors interact to impact success.[1]

Insert Figure 1 about here

A vast amount of data about children is collected within the educational setting and those data are used for the purpose of making decisions. Studied from a domain sampling model, the qualitative and/or quantitative nature of the data used in the decision making process depends on the type of decision to be made (e.g., referral, screening,

etc.). Figure 2 is a portrayal of the ways in which assessment data are used in decision making. The large box represents a domain of data (test scores, observations, etc.) available on a child. A certain set of data is relevant to and used in making referral decisions. Another set of data is used in making placement decisions, while a third set is used in planning instructional interventions. As illustrated, the sets of data used in decision making are not mutually exclusive, certain data may be relevant and useful in making more than one kind of decision. Equally important, though, is the fact that unique kinds of data are important to each of the decisions.

Insert Figure 2 about here

As will be evident throughout this paper, the whole process of assessment is a decision-making procedure - one in which our assessment strategies and techniques should be dictated by the kinds of decisions we are trying to make. To date, too much emphasis has been placed on tests in the assessment-intervention of individual needs. The use of devices appears to have dictated the strategies and techniques employed in making decisions rather than the decisions to be made dictating the most appropriate strategies and techniques to be used. Past and current practices in assessment-intervention with handicapped and non-handicapped children clearly indicate that if educators are to serve effectively and efficiently all children within the confines of the educational environment, nondiscriminatory decision-making procedures must be initiated - procedures whose focus and emphasis are dictated by the decision(s) to be made and/or function(s) to be served.

Nondiscriminatory assessment can best be approximated within the assessment-intervention context. Simply to say so, however, is not new. We have repeatedly had calls for alternatives to current norm-referenced assessment activities; calls for curriculum-based assessment (Bijou, 1971; Pennypacker, Koenig & Lindsley, 1972), diagnostic teaching (Mills, 1955; Ysseldyke, 1973; Ysseldyke & Bagnato, 1976; Ysseldyke & Salvia, 1974; Ysseldyke & Thurlow, 1979), informal teacher-based assessment (McCormack, 1976; Wallace & Larsen, 1978), and direct and daily measurement (Bohannon, 1975; Deno & Mirkin, 1977; Starlin & Starlin, 1974; Hofmeister & Crutcher, 1975; Ysseldyke, 1979). Yet, what has been missing is a conceptual framework within which to view such data collection efforts. The very system that is used to view levels of intervention can be used to conceptualize assessment within the intervention process.

Nondiscriminatory assessment can best be approximated by using data on intervention effectiveness, rather than data obtained from norm-referenced tests, to make most psychoeducational decisions. The conceptualization we propose essentially restricts the use of norm-referenced tests to classification, the purpose for which they were originally designed.

In most school systems in the United States, administrative and educational arrangements for children with special education needs have best been described as being based on a "two-box" theory (Reynolds, 1978). Administrative and educational arrangements viewed from this perspective evidence two kinds of classrooms (regular and special), two general classes of children (regular class children and exceptional or

special class children) and two categories of educators (regular class teacher and special education teacher).

Operationally, a child exhibiting difficulty in a regular classroom is referred by the teacher, social worker, nurse, and/or parent to a psychologist or other specialist (e.g. doctor, clinician, therapist) for study. If the results of the assessment indicate that the child meets the criteria for some category of handicapping condition, "appropriate" placement is arranged. Grosenick and Reynolds (1978) called attention to the fact that an erroneous assumption of the "two-box" theory is that special education services can stand alone, - meeting all of the needs of handicapped children and complying with the mandate of the law. Another fallacy under which the "two-box" theory operates is that children with demonstrated or suspected handicaps are largely different than "normal" children. Regardless of the handicapping condition or disability and subsequent label attached, classroom teachers must deal with the individual behavioral differences among and within children in order to plan successful educational programs, solve educational/academic problems and enhance achievement. Therefore, assessment of handicapped children needs to be addressed from the perspective of educational variables rather than children's handicapping conditions.

Deno (1972) stated that "better coordination of regular and special education services is a primary need of our time if we hope to improve education for handicapped children" (p. 13). A more complex administrative and educational model for the organization and delivery of special educational services and programs emerged in the mid-1960's.

An administrative and educational arrangement for the provision of services evolved that addressed issues central to the issue of providing "appropriate" educational settings, programs and alternatives that have been ignored in the "two-box" theory of provision of services. The arrangement has best been described as a cascade of services and possesses some very distinctive features.

The design and arrangement of services within the cascade appears to facilitate its use as a diagnostic filter and anticipates the number of children to be served at given levels. Reynolds and Birch (1977) characterize the cascade as follows:

> (1) It proposed that support be given to regular classrooms as one means of meeting the special needs of the children who are maintained there.
>
> (2) It proposed that children not be classified and given special placements on a permanent basis but, rather, that they be moved to special stations only for as long as necessary and that they be returned to regular classrooms as soon as feasible. Thus, no indelible labels were involved. The total number of children served over time in special settings greatly exceeds the numbers served at any given time.
>
> (3) It proposed that the boundary lines between special education and regular education be renegotiated and opened so that students might pass back and forth easily, as dictated by their educational needs.
>
> (4) It proposed that regular and special education staff members become more interactive or collaborative in their daily work, such as sharing responsibilities for students, rather than to remain isolated in their separate centers and classrooms.
>
> (5) It proposed that extraordinary justification be required whenever a child was removed from the regular school environment, especially when removal was from both home and school environments for placement in a residential center. (p 31)

Although the model was proposed for application to the development of special education services for all types of disability (Deno, 1972), its fundamental function was categorical - emphasizing places and administrative structures (Reynolds and Birch, 1977, Sosnowsky and Coleman, 1971).

Successful planning and implementation of educational programs (e.g. levels of service) and curricular alternatives involves a great deal more than the simple act of placing (categorizing) a student in a given educational environment. The structure, procedural arrangements and intended functions of the cascade of services has evolved over the years and is presented in Figure 3 (The Special Education Cascade).

Insert Figure 3 about here

The aforementioned models, delineating the administrative and educational/instructional operations of the cascade of services, have shown some capacity for growth, maturation, and diversification with respect to planning and implementation of practical educational environments for handicapped children (i.e. learning disabled, mentally retarded, socially maladjusted, emotionally disturbed, physically handicapped, blind, deaf and multiply handicapped). Yet, little effort has been devoted to the development and initiation of unbiased educational/instructional evaluation procedures to monitor the academic progress of a child within a given level of the system of services. Such monitoring procedures provide critical feedback to school personnel regarding the planning and implementation of appropriate and/or alternative instructional strategies

as well as facilitate the child's movement through the cascade in an efficient and effective manner. To date, evaluation and review processes within the educational environment have been based on the mandates of state and federal regulations - mandates that focus primarily on the summative aspects of a child's interaction with the academic environment while for the most part ignoring the complex array of formative information that clearly and completely defines and describes the child's growth and maturation within the given academic setting.

Deno (1972) states that "actual work with children provides the best diagnosis if it is thoroughly conducted" (p 14). The contention of this paper is that an unbiased assessment of a child's level of skill development and academic progress can be achieved through the adoption of some very specific strategies and procedures that will govern the formulation, implementation, evaluation and revision of academic/curricular objectives and goals for <u>individual</u> students. Critical to the advancement of an unbiased assessment strategy is the acceptance of the fact that programming of educational goals and objectives needs to be done on an individual basis. Deno (1972) reinforces this point by stating that "the only fundamentally meaningful class, for educational purposes, contains an N of one" (p 16).

The combined features of the Deno Cascade and the instructional cascade have produced an operational strategy that hypothetically fulfills the dictates and mandates of the courts and Public Law 94-142 providing both "least restrictive environments" and educations deemed "appropriate." The flaw in the operationalization of the model appears to be the absence of a catalyst which will promote the dynamic interface of child, curriculum and educator. The present structure still perpetuates

a fairly static approach to the tailoring of individual programs.

Our conceptualization of nondiscriminatory assessment within the intervention process is made possible through the "operationalization" of the Deno Cascade. We believe, simply that the data used to make decisions about individual children should, for the most part, be data on instructional interventions that have and have not worked for the child. The first step in our effort to establish nondiscriminatory assessment strategies and techniques is the suggestion that we initiate an enrollment policy that mandates all children, regardless of handicapping condition, access the continuum of educational services at the least restrictive point (i.e., the regular classroom). Since all children enter the school environment at the level of the regular classroom, a decision to move a child to the next level of service should be a data-based decision. The classroom teacher should be required to document that the regular curriculum and at least three alternative instructional strategies have been tried and evaluated -- demonstrating academic and educational goals can or cannot be achieved at that level of service. Accountability can be incorporated within this conceptualization by asking teachers prior to referral to a more intensive level of service to sign a statement that they have attempted at least three instructional alternatives and that in their opinion the child will not make progress in the current placement.

To date, administrative structures have used the cascade of services as a placement paradigm. The emphasis has been on the test based identification of the placement setting believed most appropriate for the child. Our formulation expresses a firm commitment to the concept that all children, regardless of handicapping condition, start in the least

restrictive environment and move through the cascade of services, the effectiveness of instructional alternatives documented at each level.

In this arrangement, labeling, as a factor in the assessment of an appropriate educational program and level(s) of service(s) to be provided, is simply used as an administrative convenience. The length of time that the labeling can be "avoided" in part depends on the requirements of the district, state laws, federal regulations and the definitions by which lines of funding for the support of specific educational programs is stipulated.

A child demonstrating severe handicaps (severe mental retardation) might be expected to move through the continuum of services at a much more accelerated rate than a child exhibiting mild or moderate problems. However, as the more involved child moves through the continuum of services, potentially relevant diagnostic and programmatic information is being compiled which can be used in the formulation of an appropriate instructional program and the level(s) of services(s) which can best meet given goals and objectives. The child is not relegated to a given level in the continuum based on his or her performance on a norm-referenced test. Service is provided on the basis of demonstrated and documented intervention effectiveness as the child "filters" through the cascade of services.

The essential advantage of the proposed approach is simply in the kind of data used in decision making. Those charged with the task of developing individualized instructional plans would have access to data on those interventions that have, and have not, previously worked with the child. Such data are considerably more relevant to intervention

planning than are data in the form of scores on norm-referenced tests and subtests.

The implementation, evaluation, and documentation of a child's performance within a given course of instruction, and possible alternative instructional strategies, is not only a procedural safeguard in the determination of "appropriate level(s) of service" but essential to the thorough identification of relevant individual strengths and weaknesses -- characteristics central to the development of comprehensive IIP's and IEP's.

The concept of individualization of instruction is found in the earliest history of education. However, the systematic application and evaluation of instruction as a method of achieving nondiscriminatory assessment within the intervention process is much more recent. A variety of strategies for the continuous monitoring of academic progress are available to the classroom teacher. Curriculum-based assessment, Diagnostic Teaching, Systematic Observation, Informal Teacher-based assessment, Task Analysis, and Direct and Daily Measurement are but a sampling of the strategies a teacher can bring to bear in the determination of relevant instructional objectives and strategies for their acquisition.

A major shortcoming of present assessment strategies is the lack of consistency across schools, districts, and states. We believe that consistency could be facilitated by adopting systematic procedures for initiating differentiated instruction and documenting intervention effectiveness at each level of service. A model for doing so has already been proposed by Cartwright, Cartwright, and Ysseldyke (1973). Within this approach instructional intervention with individual children takes

on the attributes of hypothesis testing. Systematic alteration of objectives, materials, methods and techniques takes place until a set of procedures is identified that moves the child effectively toward accomplishment of the objectives. Using this framework, planning, execution, and evaluation of diverse instructional strategies employing a wide range of techniques can be systematically monitored and documented for use in the continuous upgrading of individual educational programs within and across levels of service. We point out here, that the framework avails itself of virtually all instructional strategies and methods of evaluation.

Requiring systematic planning, execution and evaluation, within and across levels of service, of individual pupil programs is fundamental to the concept that the only meaningful class, for educational purposes, contains an N of one (Deno 1972).

Proposed changes in the delivery of services have implications for the existing administrative structures, the number and types of services available, and the time required for identification of handicapped children. Administrative structures are for the most part based on the continuum of services available. Since all children, regardless of handicap, start in the regular classroom, identification and placement will be based on a much more complex set of data - documenting performance on a variety of instructional programs. Services as they are presently arranged provide greater support at the primary grades and less support at the secondary grades. Later identification of children will require a reversal of the current educational trends -- providing more services at the upper grades as more relevant information about individual characteristics is compiled and unique educational needs identified.

Summary

State and local education agencies are currently engaged in a complex set of activities designed to produce nondiscriminatory assessment procedures. For the most part, those efforts are characterized by attempts to find "fair tests." Historically, similar efforts have proven ineffective, and it is our belief that such attempts will not lead to effective implementation of the intent of the law.

Throughout this paper we have contended that nondiscriminatory assessment can best be approximated by using data on intervention effectiveness, rather than test data, in planning individualized educational programs. A model for operationalizing such a system was outlined and consists essentially of embedding a formative evaluation system within existing administrative and delivery structures.

This process for the implementation of nondiscriminatory assessment within the intervention process should significantly reduce the number of children falsely identified and placed in alternative educational programs.

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Footnotes

[1] It must be observed here that typical studies of the assessment-intervention process have attempted to delineate aptitude-treatment interactions. The lack of significant findings in such studies (c.f. Bracht 1970, Ysseldyke, 1973 for summaries of research) may well be due to our failure to consider the complexity of the process (i.e. five-way interactions).

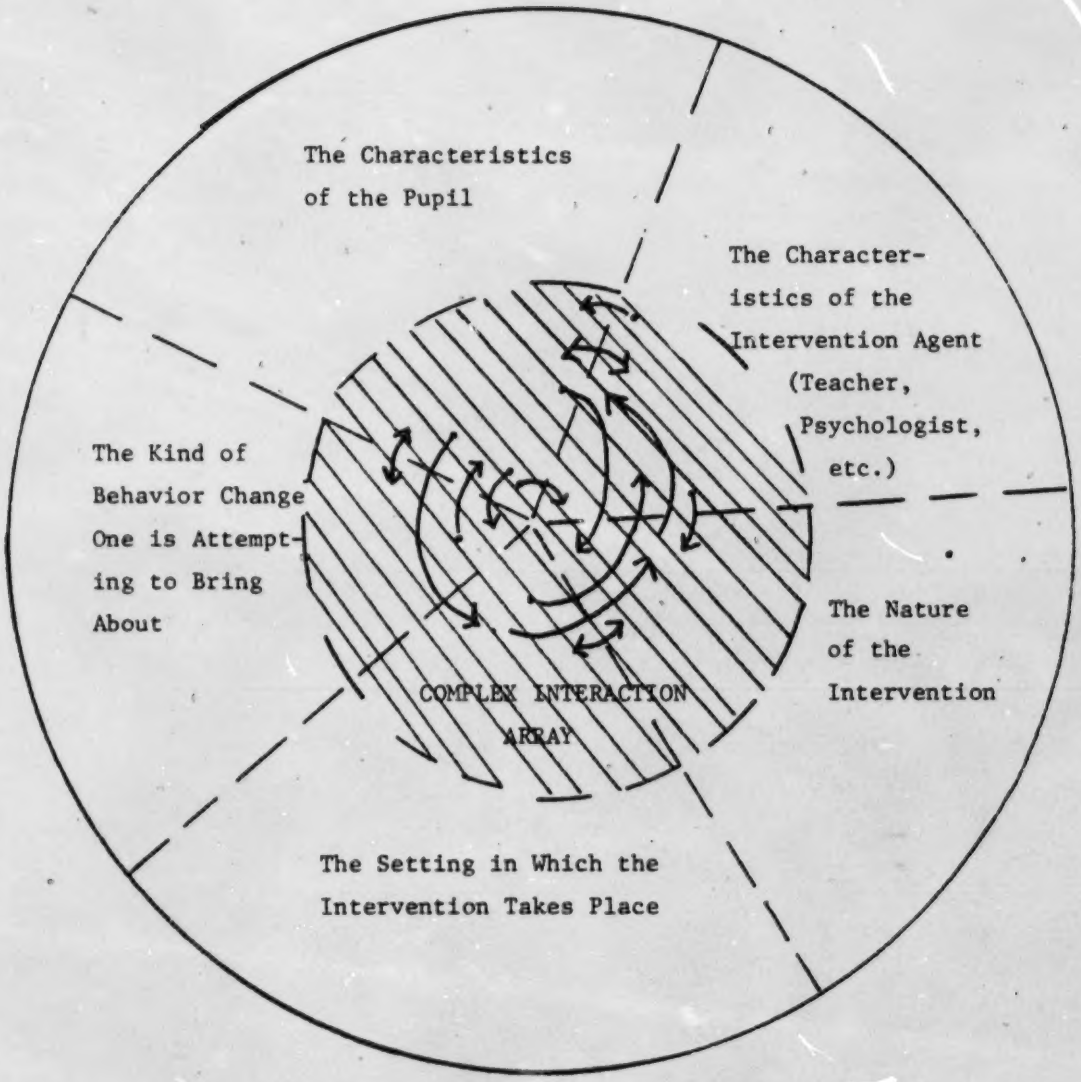
The Characteristics of the Pupil
The Characteristics of the Intervention Agent (Teacher, Psychologist, etc.)
The Kind of Behavior Change One is Attempting to Bring About
The Nature of the Intervention
COMPLEX INTERACTION ARRAY
The Setting in Which the Intervention Takes Place

Figure 1: Illustration of those factors that interact to affect intervention effectiveness.

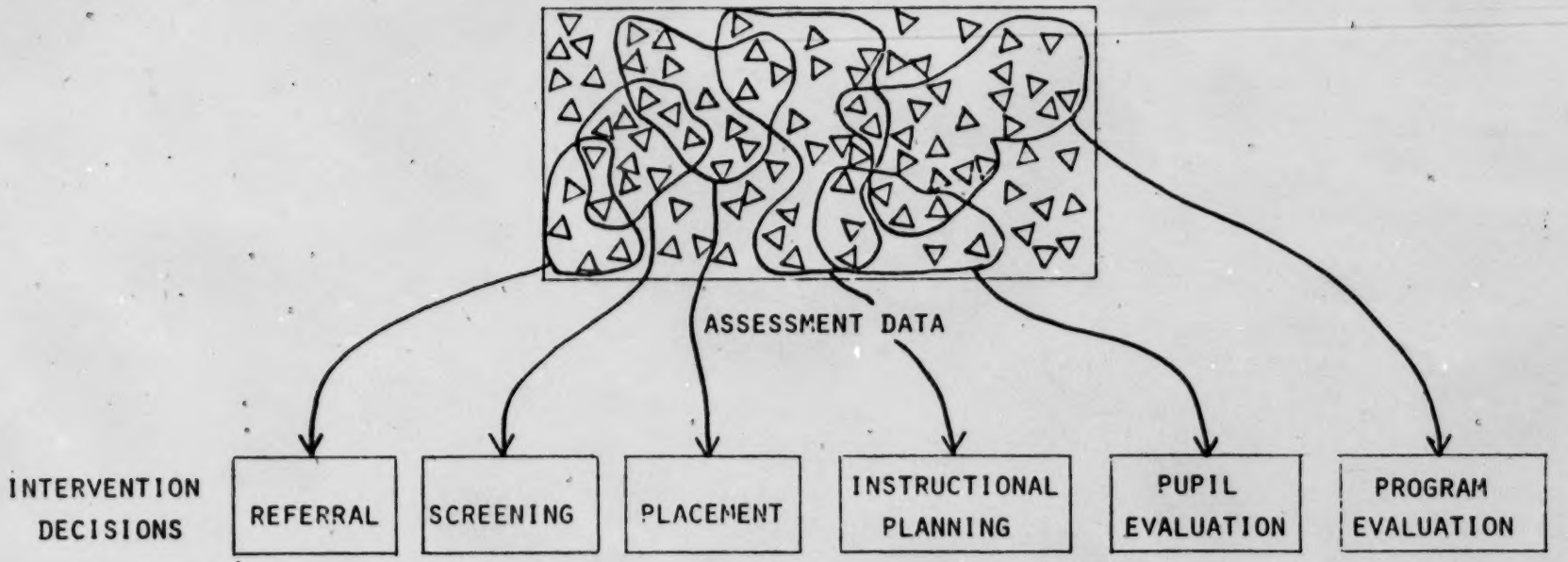

Figure 2: Illustrations of the Use of Different Kinds (sets) of Assessment Data to Make Different Kinds of Intervention Decisions.

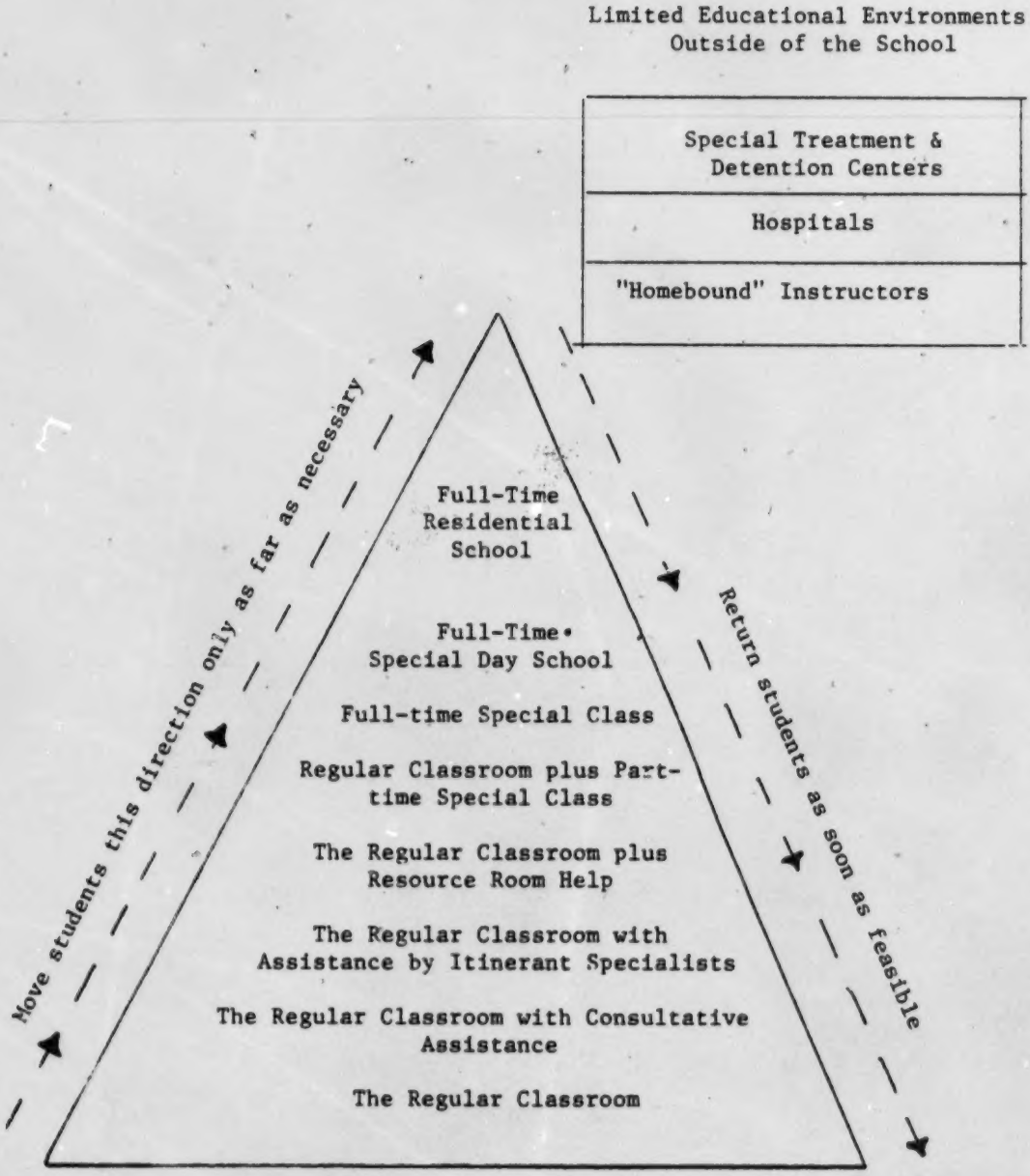
Limited Educational Environments
Outside of the School
Special Treatment & Detention Centers
Hospitals
"Homebound" Instructors
Move students this direction only as far as necessary
Return students as soon as feasible
Full-Time Residential School
Full-Time Special Day School
Full-time Special Class
Regular Classroom plus Part-time Special Class
The Regular Classroom plus Resource Room Help
The Regular Classroom with Assistance by Itinerant Specialists
The Regular Classroom with Consultative Assistance
The Regular Classroom

Figure 3: The Special Education Cascade

From Judith K. Grosenick and Maynard C. Reynolds, Teacher Education: Renegotiating Roles for Mainstreaming, 1978, 374.

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*As part of its continuation proposal, the Institute was required to prepare these monographs. Because they are part of the proposal, they are not available for general distribution.

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